Blowing Rock, NC: American Legion Site Conceptual Design

Project funding provided through a grant through the North Carolina Forest Service.
The Community Design Assistance Center (CDAC) is an outreach center in the College of Architecture and Urban Studies at Virginia Tech that assists communities, neighborhood groups and non-profit organizations in improving the natural and built environments. Assistance is provided in the areas of landscape architecture, architecture, planning, and interior design. Working with communities, the conceptual planning and design provides communities with a graphic vision of their project that can then be used for grant applications and fundraising for the next steps toward implementation.

Community Design Assistance Center
101 South Main Street, Blacksburg, Virginia 24060
p: 540.231.5644   f: 540.231.6089
http://www.cdac.arch.vt.edu
ACKNOWLEDGMENTS

The CDAC team would like to acknowledge the following individuals for their contributions throughout the project:

Ed Evans
Town Manager

Jennifer Brown
Director, Blowing Rock Parks and Recreation

Autumn Goheen
Assistant Director, Blowing Rock Parks and Recreation

Melissa Pickett
Blowing Rock Inn

Nancy Stairs
North Carolina Forest Service
Urban Forestry Program Coordinator

Stuart Scott
North Carolina Forest Service
Watauga County Ranger

Eric Muecke
North Carolina Forest Service
Western Urban Forestry Specialist

and

Those who volunteered time for the betterment of their community
**Blowing Rock, NC:**
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**Final Design Concept**

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Blowing Rock, NC:
American Legion Site Conceptual Design

PROJECT DESCRIPTION

Background

From the unmatched, far-reaching views along the Blue Ridge Parkway, to the quaint storybook mountain village, Blowing Rock, North Carolina is truly deserving of the title: “Crown of the Blue Ridge.” Here you’ll find popular family attractions including Tweetsie Railroad and The Blowing Rock, a plethora of unique downtown shops and outlets, and outdoor adventure ranging from hiking and biking to spelunking and bouldering. Blowing Rock is also very well known for its numerous parks including Memorial Park, Broyhill Park, Annie Cannon Memorial Gardens, and the Glen Burney Trail.

The popularity of these parks has increased over the years and thoroughfares are being utilized more and more. There are several on-going initiatives to increase visitation and use of Broyhill Park. Most recently the Town has adopted a management plan for the park that will position the park as a popular wedding venue. The town swimming pool is also a very popular destination in the summer time. Summer camps frequent the park and surrounding spaces. The current uses and projected increased visitation to Broyhill Park and downtown areas suggest that the Town consider improvements to the American Legion building site since it serves as a key pedestrian corridor in the community.
Blowing Rock, NC:
American Legion Site Conceptual Design

PROJECT DESCRIPTION

Project Overview

The most used pedestrian thoroughfares in Blowing Rock are the paths that connect Broyhill Park and adjacent parks with the downtown area. There are two sets of stairs that have worn down over the years, becoming dangerous for visitors. There is not an ADA-accessible route from Broyhill Park to the American Legion building. Further, pedestrian routes are poorly marked throughout the site and along Park Avenue, resulting in pedestrians walking in the middle of the road.

The existing stairs behind the American Legion building have also been negatively affected by an erosion problem. Heavy silt deposits generated by multiple sources are adversely affecting Mayview Lake, which is fed by a North Carolina Trout Headwater. The erosion issue has led to the need of dredging Mayview Lake on a more frequent basis than normal and has begun to wash out portions of the stairs. The deteriorated state of the stairs has led, in part, to the creation of informal trails in less stable areas that add additional concern about safety and excessive erosion on the site.

There was a great need to explore ways that the American Legion site can serve and function as a connector between popular destinations, but in a way that is safe for citizens and visitors. Further, there was a desire that future improvements reduce the negative impacts that poorly managed runoff has imposed on wildlife inhabiting Mayview Lake.

The American Legion building site also needed a tree replacement plan for aesthetic improvements, pedestrian safety, run-off reduction, and to encourage greater species diversity among Blowing Rock’s tree population.
Blowing Rock, NC: American Legion Site Conceptual Design

PROJECT DESCRIPTION

Blowing Rock is located in western North Carolina in both Watagua and Caldwell counties (above). Blowing Rock is about fifteen minutes from Boone and thirty minutes northwest of the Lenoir.

The following pages show the location of the American Legion site within the town of Blowing Rock along with images of the site.
North steps

North steps

Broyhill Park path

Lawn adjacent to public parking deck

South steps

Broyhill Park path

South steps

American Legion entrance

Slope behind American Legion building
The design process began with an initial input session with stakeholders on June 1, 2017. During that visit representatives from the Blowing Rock Parks and Recreation Department (BRPRD) as well as the Blowing Rock Appearance Advisory Commission (BRAAC) gave the CDAC team a tour of the town. The CDAC team had the opportunity to learn how the general public currently passed through the site and what areas were problematic for the pedestrian experience. Participants had the opportunity to suggest specific goals they would like to see implemented later on the project site. Suggestions for the site provided by the stakeholders included an ADA-accessible route, opportunities for new social gathering, and a cohesive “look and feel” that complimented the rest of the community. Photographs, early sketches, and input from the stakeholder group, combined with mapping, created a comprehensive inventory of the existing conditions found at the site.

The CDAC team studied the inventory to understand various circulation trends and patterns in Blowing Rock that could be incorporated into the design. Known as a site analysis, certain limitations and opportunities influenced what design recommendations would be most appropriate for the site. The team returned to Blowing Rock on June 27, 2017 to present two preliminary design concepts to the stakeholder group. Participants were invited to provide feedback on the designs. The two final conceptual designs were presented to the community on August 1, 2017. Due to a overall positive reception of the final design concept, CDAC was invited back to Blowing Rock on August 22, 2017 for a special town council meeting to present to Blowing Rock’s elected officials.

The final design concept and descriptions can be found on the following pages.

Meeting notes from the input sessions and community presentations can be found in the Appendix.

CDAC project manager Nick Proctor (standing) works with the Blowing Rock stakeholder group to map routes used by pedestrians around the American Legion site.
PART 1: FINAL CONCEPTUAL DESIGN
Design Description

Anchored by the American Legion building and the public parking deck, the final design concept encourages pedestrians to gather in a variety of places between Mayview Lake/Broyhill Park to Memorial Park. Additionally, there are many other connectivity improvements such as signage and ADA sidewalks that encourage walking rather than driving from the downtown area to the Broyhill Park and the town pool. Proposed traffic calming measures slow drivers down by improving sight lines, formalizing pedestrian crossings, narrowing the streets where possible, and adding strategic speed bumps. The American Legion hillside remains visible from all areas, while planting a variety of replacement trees keeps the vegetation on a healthy rotation. Stormwater management is improved by adding rain gardens along the streets and parking lots. Rain garden retention areas on the north side of the American Legion slows down stormwater runoff water which allows sediment to fall out of suspension before entering Mayview Lake.

Social Spaces:
The final design adds a second fishing deck along the eastern edge of Mayview Lake. This fishing deck compliments the existing one and is located approximately 250 feet south of the existing fishing deck. It provides another stopping point along the lake path and offers beautiful views of the lake and gazebo.

On the hillside by the American Legion building, there is a stone plaza with adirondack chairs for casual group gathering. The stone plaza is built within the hillside using a tiered series of two retaining walls, which offer two different gathering spaces.

On the north side of the American Legion building next to the parking lot is a picnic pavilion. The pavilion is constructed using a heavy timber construction and stonework that matches the aesthetics of the American Legion building. A kiosk for visitor information can be added to the pavilion design for visitors passing through the area.

Across Wallingford Road from the picnic pavilion is the Blowing Rock Parks and Recreation Department. A stone plaza is proposed with signage and seating on either side of Wallingford Road and lead pedestrians to the Blowing Rock Memorial Park and the Blowing Rock public offices.

American Legion Hillside Improvements:
The hillside is transformed into a beautiful space offering plazas with sitting areas, a path, and an updated tree planting. Stone retaining walls reflect the character of the area and provide additional seating opportunities. The new pedestrian sidewalk lighting is incorporated into the retaining walls located along the path, under the American Legion building deck and match the taller, pedestrian scale street lamps found in Memorial and Broyhill Parks.
The design concept daylights the existing runoff from the public buildings, Park Avenue, and Wallingford Road to create a natural waterfall feature that is aesthetically and ecologically valuable. The waterfall feature is located near the existing north set of stairs, can be visually interesting, blends in with the surrounding hillside, and cleans the water with native plantings before flowing into Mayview Lake. The hillside is steep which requires a series of rocks and boulders to initially slow the water down to avoid additional erosion.

The hillside in general is planted with vegetation that requires minimal maintenance. While the plantings will fill the hillside, they also will not create any hidden areas that cause a safety concern or block the views from the American Legion green space or the upper deck.

Park Avenue and Wallingford Road Rain Gardens:
The rain gardens added to the existing streets are not only aesthetically pleasing, but also clean the stormwater runoff from the streets. The rain gardens can feature native plantings from the surrounding region that educates the public with small informative signage. The rain gardens contain low maintenance plantings that do not grow tall which helps drivers and pedestrians see each other. The rain gardens can feature a variety of colored plantings that enhance the color along the roadways. Wildflowers can provide an alternative to the traditional hanging baskets found elsewhere in the downtown area.

Pedestrian and Roadway Improvements:
A proposed ADA-accessible ramp at an 8% gradient (see Appendix) provides safe access for pedestrians from Broyhill Park to the lawn behind the American Legion building, and eventually onto Wallingford Road. Pedestrian crosswalks throughout the project area are painted, stamped asphalt to appear to look like pavers similar to what is found on Main Street in downtown Blowing Rock. The main pedestrian crossing adjacent to the Parks and Recreation Department building connecting Memorial Park is raised to serve as a speed bump that slows vehicles in an area known for heavy pedestrian traffic.

All of the crosswalks and pedestrian sidewalks throughout the site are lit at night with street lighting that matches the existing lamp posts on Main Street and Memorial Park.

The sidewalk between the Parks and Recreation Department and the tennis courts is a popular thoroughfare for pedestrians. This walkway, however, is not very pedestrian friendly given its under-sized width with AC units for the buildings scattered about. A widened pedestrian corridor is created by removing six feet of the existing tennis courts. The tennis courts remain regulation size while allowing for a wider pedestrian walkway with a vegetated border to soften the walkway edge.

Park Avenue is another popular route that pedestrians use to get from Broyhill Park to the downtown area. This portion of road does not currently have any sidewalks.
Blowing Rock, NC:
American Legion Site Conceptual Design

FINAL DESIGN CONCEPT

until just before the library. The lack of sidewalks, markings, and signage confuses pedestrians which results in people walking through the middle of the road. A pedestrian sidewalk is added to both sides of Park Avenue. This can be accomplished without altering the existing parking configuration or removing parking spaces. Cars can park in angled spots on the north side of Park Avenue while parallel parking remains on the south. Sidewalk improvements include a five-foot pedestrian sidewalk proposed along the south side of Park Avenue. The proposed sidewalk does not conflict with the Parks and Recreation Department’s current access to their service bays along Park Avenue.
Disclaimer: This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**Blowing Rock, NC: American Legion Site Conceptual Design**

A. Picnic Pavilion  
B. Stone Plaza with Seating (at grade with Wallingford Rd.)  
C. Stairs with Concrete, Stone, and Pavers  
D. Stormwater Drainage Waterfall with Boulders  
E. Plateau Stone Plaza with Seating  
F. ADA-Accessible Ramp  
G. Pedestrian Walkway & American Legion Service Entrance  
H. Pedestrian Crosswalks  
I. Wooden Fishing Deck (North Existing, South Proposed)  
J. Pedestrian Corridor Expansion/Building Entrance Enhancement  
K. Parallel Public Parking  
L. Perpendicular Public Parking  
M. Angled Public Parking  
N. Pedestrian Connection to Memorial Park from Broyhill Park  
O. Pedestrian Walkway with Paver Delineation  
P. Rain Gardens  
Q. Raised Pedestrian Crosswalk  
R. Visitor Information Kiosk (existing)  
S. Temporary Dumpster Location  

Perspective Vantage Point
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Blowing Rock, NC: American Legion Site Conceptual Design
Final Design Concept
Final Master Plan
August 1, 2017

PHASE 1: RED
Park Avenue Crosswalk (H)
Park Avenue Walkway w/ Pavers (O)
Street Lighting
Rain Gardens
Wayfinding Signage (throughout)

PHASE 2: ORANGE
Pedestrian Corridor Expansion (J)
Town Offices Entrance Improvements
Stone Plaza w/ Seating (B)
New Retaining Wall
ADA-Ramp to Pedestrian Corridor

PHASE 3: PURPLE
American Legion ADA-Accessible Ramp (F)
Plateau Stone Plaza w/ Seating (E)
Stairs w/ Concrete, Stone, and Pavers (C)

PHASE 4: BLUE
Pedestrian Walkway and American Legion Service Entrance (G)
Stairs with Concrete, Stone and Pavers (C)
Mural on American Legion building
Pedestrian Crosswalks (H)
Stone Plaza w/ Seating (B)
Rain Gardens (P)
Raised Pedestrian Crosswalk (Q)
Restructured Public Street Parking (K)

PHASE 5: GREEN
Stairs with Concrete, Stone and Pavers
(to Laurel Lane, Bistro Roca, Annie Cannon Garden, Etc.) (C)
Second Wooden Fishing Deck (I)
Stormwater Drainage Waterfall with Boulders (D)
Picnic Pavilion (A)
At the base of the backside of the American Legion building is an open green lawn for recreation activities. A stone retaining wall creates a larger lawn and overlook facing Mayview Lake and the gazebo. String lighting is placed under the deck to create a welcoming atmosphere in the evening hours.
An ADA-accessible ramp connects the American Legion building parking lot and public parking garage to the trails surrounding Mayview Lake. Two overlooks along the ramp serve as resting points and social gathering spaces.
The service area of the American Legion building is converted into a pedestrian friendly space with a dedicated crossing, seating walls, plantings, and signage. The asphalt is replaced with pavers and concrete, while still allowing service vehicles to access the bottom floor of the American Legion building.
Wallingford Road parking is reorganized into parallel parking with rain garden planters to slow vehicular traffic in an area of heavy pedestrian traffic. The crosswalk serves as a speed bump to slow down traffic and to create a more ADA-friendly crossing. The plaza serves as a place for picnicking and social gathering along the street.
The connection from the American Legion building and public parking deck to Memorial Park is widened by removing six feet of the existing tennis court surface. Office entrances on the backside of the building are more welcoming with small awnings and planters as well as the landscaping complimented by a mural, welcome sign, and wooden pergola.
Park Avenue, currently dangerous for pedestrians, is improved by adding rain gardens with street lighting to separate the pedestrian sidewalk from the vehicular traffic. Blowing Rock town vehicles and staff can still access the various service bays and building entrances along Park Avenue as they currently do.
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Legend
- Replace immediately; safety concern to general public
- Poor but stable condition; Replace in conjunction with the construction schedule that implements the concept
- Healthy; work with professionals to preserve during construction of concept
<table>
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<tr>
<th>Tree Number</th>
<th>Species</th>
<th>NCFS Comment</th>
<th>Replacement Category</th>
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<tr>
<td>261</td>
<td>Pine</td>
<td>Roots covered during construction; further decline expected; remove</td>
<td>2</td>
</tr>
<tr>
<td>262</td>
<td>Hemlock</td>
<td>Dead wood; Die back will continue; remove</td>
<td>1</td>
</tr>
<tr>
<td>263</td>
<td>Hemlock</td>
<td>Declining; can keep to anchor slope; on its way out though; has more crown than surrounding trees; needs treatment for woolly adelgid</td>
<td>2</td>
</tr>
<tr>
<td>264</td>
<td>Pine</td>
<td>Terrible health from decay</td>
<td>1</td>
</tr>
<tr>
<td>265</td>
<td>Oak</td>
<td>Prune for single leader; remove #265 to reduce competition</td>
<td>3</td>
</tr>
<tr>
<td>266</td>
<td>Pine</td>
<td>Needs cabling and bracing for limb health; prune dead wood</td>
<td>3</td>
</tr>
<tr>
<td>267</td>
<td>Pine</td>
<td>n/a</td>
<td>3</td>
</tr>
<tr>
<td>268</td>
<td>Pine</td>
<td>History of breakage</td>
<td>2</td>
</tr>
<tr>
<td>269</td>
<td>Pine</td>
<td>Remove immediately</td>
<td>1</td>
</tr>
<tr>
<td>270</td>
<td>Pine</td>
<td>Prune dead wood</td>
<td>3</td>
</tr>
<tr>
<td>271</td>
<td>Pine</td>
<td>Little dead wood</td>
<td>3</td>
</tr>
<tr>
<td>272</td>
<td>Pine</td>
<td>Dead; remove</td>
<td>1</td>
</tr>
<tr>
<td>273</td>
<td>Norway Maple</td>
<td>Non-Native; Invasive; Remove and replace with more appropriate species</td>
<td>1</td>
</tr>
<tr>
<td>274</td>
<td>Staghorn Sumac</td>
<td>Spreads by suckers; keep an eye on it</td>
<td>2</td>
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<tr>
<td>275</td>
<td>Pine</td>
<td>Generally stressed; slow growth leading to a slow death</td>
<td>2</td>
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<tr>
<td>276</td>
<td>Pine</td>
<td>Clump of pines</td>
<td>3</td>
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<tr>
<td>277</td>
<td>Oak</td>
<td>Prune to enhance the crown; young enough to keep</td>
<td>3</td>
</tr>
<tr>
<td>278</td>
<td>Maple</td>
<td>n/a</td>
<td>3</td>
</tr>
<tr>
<td>279</td>
<td>Maple</td>
<td>Many cavities; further inspect for health</td>
<td>3</td>
</tr>
<tr>
<td>280</td>
<td>Hemlock</td>
<td>Treat for woolly adelgid</td>
<td>3</td>
</tr>
<tr>
<td>281</td>
<td>Hemlock</td>
<td>Dead; remove</td>
<td>1</td>
</tr>
<tr>
<td>282</td>
<td>Hemlock</td>
<td>Dead; remove; lots of crown die-back</td>
<td>1</td>
</tr>
<tr>
<td>283</td>
<td>Hemlock</td>
<td>Leaning towards building; showing signs of decline</td>
<td>2</td>
</tr>
<tr>
<td>284</td>
<td>Hemlock</td>
<td>Leaning towards building; showing signs of decline</td>
<td>2</td>
</tr>
<tr>
<td>285</td>
<td>Red Maple</td>
<td>Gridling roots; bad shape; remove</td>
<td>1</td>
</tr>
<tr>
<td>286</td>
<td>Red maple</td>
<td>Not as bad as #287; gridling roots though</td>
<td>1</td>
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### Replacement Category Definitions:

1. Replace immediately; safety concern to general public
2. Poor but stable condition; Replace in conjunction with the construction schedule that implements the concept
3. Healthy; work with professionals to preserve during construction of concept

CDAC recommends consulting with the North Carolina Forest Service with regard to interpreting, adopting, and/or implementing any of the tree replacement strategies presented in this report.

North Carolina Forest Service:
Nancy Stairs
Urban Forestry Program Coordinator
nancy.stairs@ncagr.gov
(919) 857-4842
American Sycamore, Platanus occidentalis

- Suggested Use: Shade tree near Mayview Lake
- Maintenance: Low
- Water: Medium
- Sun: Full sun to part shade
- Bloom Description: Yellowish-green
- Bloom Time: April to May
- Height: 50 to 80 feet
- Spread: 40 to 55 feet

Bald Cypress, Taxodium distichum var. distichum

- Suggested Use: Shade tree
- Maintenance: Medium to high
- Water: Medium to wet
- Sun: Full sun to part shade
- Bloom Description: Greenish-white
- Bloom Time: May to June
- Height: 60 to 80 feet
- Spread: 40 to 80 feet

Shagbark Hickory, Carya ovata

- Suggested Use: Near Mayview Lake
- Maintenance: Low
- Water: Medium to wet
- Sun: Full sun
- Bloom Description: Brown
- Bloom Time: Non-flowering
- Height: 20 to 45 feet
- Spread: 20 to 40 feet

Winged Elm, Ulmus alata

- Suggested Use: Shade tree, street tree
- Maintenance: Low
- Water: Medium to wet
- Sun: Full sun to part shade
- Bloom Description: Reddish green
- Bloom Time: March to April
- Height: 40 to 55 feet
- Spread: 25 to 40 feet

Southern Magnolia, Magnolia grandiflora

- Suggested Use: Flowering tree
- Maintenance: Medium
- Water: Medium
- Sun: Full sun to part shade
- Bloom Time: May to June
- Height: 60 to 80 feet
- Spread: 30 to 50 feet

American Beech, Fagus grandifolia

- Suggested Use: Shade tree
- Maintenance: Low
- Water: Medium
- Sun: Full sun to part shade
- Bloom Description: Yellowish-green
- Bloom Time: April to May
- Height: 50 to 80 feet
- Spread: 40 to 80 feet

Kentucky Coffee Tree, Gymnocladus dioica

- Suggested Use: Shade tree
- Maintenance: Low
- Water: Medium
- Sun: Full sun
- Bloom Description: Greenish-white
- Bloom Time: May to June
- Height: 20 to 30 feet
- Spread: 20 to 50 feet

Black Tupelo, Nyssa sylvatica

- Suggested Use: Shade tree
- Maintenance: Low
- Water: Medium to wet
- Sun: Full sun
- Bloom Description: Greenish white
- Bloom Time: May to June
- Height: 30 to 50 feet
- Spread: 20 to 30 feet

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---

**Eastern Red Cedar, Juniperus virginiana**  
Easily grown in average, dry to moist, well-drained soils in full sun. Tolerates a wide range of soils and growing conditions, from swamps to dry rocky glades. Has the best drought resistance of any conifer native to the eastern U.S.  
- Height: 30 to 65 feet  
- Spread: 8 to 25 feet  
- Bloom Time: Non-flowering  
- Sun: Full sun  
- Maintenance: Low  
- Suggested Use: Year-round evergreen color  

---

**American Basswood, Tilia americana**  
Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Tolerates some drought. Prefers moist, fertile, well-drained loams. Generally intolerant of air pollution and urban conditions.  
- Height: 50 to 80 feet  
- Spread: 3 to 60 feet  
- Bloom Time: June  
- Sun: Full sun to part shade  
- Water: Medium  
- Maintenance: Low  
- Suggested Use: Shade tree, flowering tree

---

**River Birch, Betula nigra**  
Easily grown average, medium to wet soils in full sun to part shade. Prefers moist, acidic, fertile soils including semi-aquatic conditions; tolerates drier soils. Consider using soaker hoses and bark mulches to keep the root zones cool and moist.  
- Height: 40 to 70 feet  
- Spread: 40 to 60 feet  
- Bloom Time: April to May  
- Bloom Description: Brown (male) green (female)  
- Sun: Full sun to part shade  
- Water: Medium to wet  
- Maintenance: Low  
- Suggested Use: Shade tree

---

**Sugar Maple, Acer saccharum**  
Easily grown in average, medium moisture, well-drained soil in full sun to part shade. Best in fertile, slightly acidic, moist soils, in full sun. Grows poorly in compacted, poorly drained soils. Has a reputation for spectacular fall color.  
- Height: 40 to 80 feet  
- Spread: 30 to 60 feet  
- Bloom Time: April  
- Bloom Description: Greenish  
- Sun: Full sun to part shade  
- Water: Medium  
- Maintenance: Medium  
- Suggested Use: Shade tree

---

**Persimmon, Diospyros virginiana**  
Easily grown in average, dry to medium, well-drained soils in full sun to part shade. Tolerates drought. Promptly remove root suckers unless naturalized effect is desired. Female trees need a male pollinator in order to set fruit.  
- Height: 35 to 60 feet  
- Spread: 25 to 35 feet  
- Bloom Time: May to June  
- Bloom Description: White to greenish yellow  
- Sun: Full sun to part shade  
- Water: Dry to medium  
- Maintenance: Low  
- Suggested Use: American Legion hillside

---

**Tuliptree, Liriodendron tulipifera**  
Easily grown in average, dry to medium, well-drained soil in full sun to part shade. Tolerates drought. Prune immediately after flowering since flower buds form in summer for the following year.  
- Height: 60 to 90 feet  
- Spread: 30 to 50 feet  
- Bloom Time: May to June  
- Bloom Description: Yellow with orange band at petal bases  
- Sun: Full sun  
- Water: Medium  
- Maintenance: Low  
- Suggested Use: Shade tree, flowering tree

---

**American Chestnut, Castanea dentata**  
Grow in moist, well-drained loams in full sun. Species plants should not be planted as ornamentals due to susceptibility to blight. Research is ongoing for developing disease resistant varieties.  
- Height: 35 to 75 feet  
- Spread: 50 to 75 feet  
- Bloom Time: June  
- Bloom Description: Yellow-white  
- Sun: Full sun  
- Water: Medium  
- Maintenance: High  
- Suggested Use: Shade tree

---

**Red Oak, Quercus rubra**  
Easily grown in average, dry to medium moisture, acidic soil in full sun. Prefers fertile, sandy, finely-textured soils with good drainage. Generally a durable and long-lived tree.  
- Height: 50 to 75 feet  
- Spread: 50 to 75 feet  
- Bloom Time: May  
- Bloom Description: Yellowish-green  
- Sun: Full sun  
- Water: Dry to medium  
- Maintenance: Low  
- Suggested Use: Shade tree, street tree

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**Blowing Rock, NC: American Legion Site Conceptual Design**

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[Tree Replacement Palette: Large Mature Size; Long-Lived (2 of 2)]
Disclaimer: This drawing is conceptual and was prepared to show approximate location and arrangement of site features. Benefits from a 2-4" mulch which will help keep roots cool and moist in summer.

Flowering Dogwood, Cornus florida
- Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Prefers moist, organically rich, acidic soils in part shade. Benefits from a 2-4" mulch which will help keep roots cool and moist in summer.
- Height: 15 to 30 feet
- Spread: 15 to 30 feet
- Bloom Time: April to May
- Bloom Description: White (bracts)
- Needs: Full sun to part shade
- Water: Medium
- Maintenance: Low
- Suggested Use: Flowering tree

Carolina Cherry Laurel, Prunus caroliniana
- Best in moist but well-drained soils in full sun to part shade. Established plants have good drought tolerance. Propagate by cuttings, root suckers or seed. With self-seeded in the landscape.
- Height: 15 to 20 feet
- Spread: 10 to 15 feet
- Bloom Time: February to April
- Bloom Description: White
- Sun: Full sun to part shade
- Water: Medium
- Maintenance: Low
- Suggested Use: Hedge, flowering tree, native plantings

Serviceberry, Amelanchier arborea
- Easily grown in average, medium, well-drained soil in full sun to part shade. Best in shrub borders, or in woodland, naturalized or native plant gardens, especially with dark or shaded backdrops which tend to highlight the form, flowers and fall color of the plant.
- Height: 15 to 25 feet
- Spread: 15 to 25 feet
- Bloom Time: March to April
- Bloom Description: White
- Sun: Full sun to part shade
- Water: Medium
- Maintenance: Low
- Suggested Use: Flowering tree

American Hop Hornbeam, Ostrya virginiana
- Easily grown in average, medium, well-drained soil in full sun to part shade. It tolerates dry, even rocky soil. This tree has no serious pest problems, although it can be susceptible to chestnut borer if it is under stress.
- Height: 25 to 40 feet
- Spread: 20 to 30 feet
- Bloom Time: April
- Bloom Description: Red-brown (male), light green (female)
- Sun: Full sun to part shade
- Water: Medium
- Maintenance: Low
- Suggested Use: Shade tree, street tree

American Holly, Ilex opaca
- Easily grown in average, medium, well-drained soil in full sun to part shade. May be grown as a large, multi-stemmed shrub or trained as single trunk tree.
- Height: 30 to 40 feet
- Spread: 20 to 35 feet
- Bloom Time: April
- Bloom Description: White
- Sun: Full sun to part shade
- Water: Medium
- Maintenance: Low
- Suggested Use: Flowering tree

Eastern Redbud, Cercis canadensis
- Specimen or small groups. Lawns, shrub borders, woodland margins, or along patios. Street tree or lawn tree. Attractive in naturalized settings. Avoid wet or poorly drained soils.
- Height: 20 to 30 feet
- Spread: 25 to 35 feet
- Bloom Time: April
- Bloom Description: Pink
- Sun: Full sun to part shade
- Water: Medium
- Maintenance: Low
- Suggested Use: Street tree, flowering tree
PART 2: INVENTORY AND ANALYSIS
Blowing Rock, NC: American Legion Site Conceptual Design

INVENTORY AND ANALYSIS

Description

The American Legion site is located along Wallingford Road and adjacent to the Blowing Rock Parks and Recreation Department, Memorial Park, public parking garage, Mayview Lake, and Broyhill Park. The topography on the site is very steep but is heavily used by the public traveling to and from popular destinations in the downtown area. After discussing this with the Blowing Rock stakeholder group, it became apparent that the CDAC team had to broaden its focus to map and analyze surrounding pedestrian destinations.

After conducting an analysis of both the American Legion site and surrounding pedestrian destinations, it became clear that there was not a hierarchy of pedestrian pathways and dedicated crossings. Further, wayfinding signage is very limited in this area to direct pedestrians to certain areas. This confusion results in pedestrians often walking in the middle of both Wallingford Road and Park Avenue, creating an unsafe environment for the pedestrians and vehicles.

There are, however, several opportunities to mediate pedestrian/ vehicle confusion by consolidating pedestrian walkways to a centralized pedestrian corridor. There are opportunities to enhance pedestrian connections by enhancing existing walkways and constructing a series of new ramps and staircases that make the route more apparent.

Following are both inventory and analysis maps that depict CDAC’s findings.
Blowing Rock, NC: American Legion Site Conceptual Design

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PART 3:
PRELIMINARY CONCEPTUAL DESIGNS
Blowing Rock, NC: American Legion Site Conceptual Design

PRELIMINARY DESIGN CONCEPT 1

Design Description

Preliminary design concept 1 expands public gathering opportunities while enhancing the overall pedestrian experience through a site that is currently very steep. A series of ramps at an 8% gradient (see Appendix) connects Mayview Lake to the American Legion building and the parking garage. The plan also maximizes the event space for the American Legion building with plazas and a new picnic pavilion for larger or multiple events. The concept features a variety of different stone and timber aesthetics to match the existing architecture within the surrounding parks and buildings.

Public Spaces:
There are two fishing decks at the base of the hillside that overlook Mayview Lake, one at the existing location and another approximately 250 feet south creating more private spaces on the water. On the hillside centered with the American Legion building serving as a landing along the ADA ramp is a small plateau stone plaza for casual group gatherings tucked between retaining walls. The stone plaza allows for formal and casual gatherings to occur on the hillside with views of Mayview Lake and Broyhill Park.

At the top of the hillside north of the American Legion building is a picnic pavilion made up of timbers and stone that matches the aesthetics of the American Legion building and overlooks Broyhill Park.

Across the street from the American Legion building and behind the Blowing Rock Parks and Recreation Department building is a formal stone plaza encircled with small shrubs and seating that leads pedestrians to Memorial Park and town offices. The plaza can serve as a meeting area for professionals, tourists, and camps traveling between Broyhill and Memorial Parks.

Pedestrian and Vehicular Circulation:
A more comfortable and beautiful walkway from Wallingford Road to Memorial Park can be built by widening the existing walkway behind the Parks and Recreation Department and Police Department building. This can be accomplished by eliminating six feet of the tennis courts. The tennis courts remain regulation size despite this reduction.

On the front side of the Parks and Recreation Department and Police Department building a pedestrian sidewalk is added to both sides of Park Avenue. Each pedestrian sidewalk is five-feet wide. The proposed sidewalk on the south side of Park Avenue must be at-grade with the existing asphalt when passing the service bays that are currently used by the Parks and Recreation Department. Once implemented, a 20’ buffer remains between the sidewalk and the service bays allowing for town vehicles to park and operate as the currently do.
Preliminary Design Concept 1

Stormwater Management:
The design concept daylights the existing runoff from the public buildings, Park Avenue, and Wallingford Road to create a natural waterfall feature that is an aesthetically pleasing view whether it is dry or full of stormwater runoff. The waterfall feature can be visually interesting and blend in with the surrounding hillside, while also filtering the water with a variety of vegetation before flowing into Mayview Lake. The ground condition is steep, so bringing in a series of rocks and boulders to slow the water down is also needed.
A. Picnic Pavilion
B. Stone Plaza with Seating
C. Stairs with Concrete, Stone, and Pavers
D. Stormwater Waterfall with Boulders
E. Plateau Stone Plaza with Wooden Adirondack Chairs
F. Plateau Stone Plaza with Stone Retaining Wall
G. Pedestrian Walkway Plaza
H. Raised Pedestrian Crosswalks
I. Wooden Fishing Deck (North Existing, South Proposed)
J. Pedestrian Connection
K. Parallel Public Parking
L. Angled Public Parking
M. Visitor Information Kiosk
N. Pedestrian Connection to Memorial Park from Broyhill Park
O. Paver Pedestrian Walkway
P. Rain Gardens
View from between American Legion building and public parking garage. ADA-accessible ramps, with 8% 30' ramps (including 5' landings), stone plateau plaza, and a recreation/event green (upper right).
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Blowing Rock, NC: American Legion Site Conceptual Design

Preliminary Design Concept 1

Precedent Images

A. Picnic Pavilion

B. Stone Plaza with Seating

C. Stairs with Concrete, Stone, Pavers, and Metal Railing

D. Natural Stormwater Drainage Waterfall with Boulders

E. Stone Terrace with Wooden Adirondack Chairs

F. Flagstone Plaza with Stone Retaining Wall
Design Description

Preliminary design concept 2 focuses on improving pedestrian circulation for a variety of users with unique mobility needs within an intensive stormwater retention framework. The design includes expanded public gathering spaces behind the American Legion building that can accommodate large parties for special events. All of the design recommendations are stitched together using a material palette that matches the aesthetic of the town’s existing buildings and parks. The design includes a stormwater management system that addresses existing sedimentation issues in Mayview Lake caused by runoff collected from surrounding properties. The stormwater management system is created by a combination of retention structures and intensive vegetation plantings that contributes both ecological and aesthetic improvements to the property.

Expanded Gathering Spaces:
The green space at the base of the American Legion building is expanded using a retaining wall on the west side of the lawn. A wide sidewalk against the retaining wall provides a great viewing opportunity of both Mayview Lake and Broyhill Park below. This space can be utilized by the general public as a social gathering space for everyday picnicking or relaxing. During special events, invited guests can use this space as an extension of American Legion’s outside deck just above. Finally, lights can be strung underneath the American Legion deck to create a pleasant outside venue for special events into the evening hours.

Pedestrian Circulation:
Walkways and crosswalks are added to establish a better connection and a safe walking experience between Broyhill Park and the downtown area. Pedestrians can use one of two paths to move across the hill behind the American Legion building; 1) a central staircase or 2) a meandering ADA ramp on the south of the staircase next to the public parking deck.

The central staircase provides a “grand accent” walking from Broyhill Park to the American Legion. Aligned with the upper deck of the American Legion building, this staircase can be used as an iconic photograph location for special events such as a wedding. On the east, the staircase empties onto the expanded lawn area where walkways on either side of the building provide pedestrian access to the front of the American Legion, Town offices, Memorial Park, and Main Street businesses. On the west, the central staircase terminates at a second fishing deck that juts out into Mayview Lake.

An ADA-accessible ramp south of the central staircase connects the public parking garage to Broyhill Park and can be utilized by both bicyclists and pedestrians. This path meanders next to a portion of the larger trees on the property that are in relatively good health. At the top of the ramp, a pedestrian crossing provides a safe passage through the service area of the American Legion building before using an...
Blowing Rock, NC:
American Legion Site Conceptual Design

PRELIMINARY DESIGN CONCEPT 2

existing set of steps to access the American Legion parking lot.

The central staircase and ADA-accessible ramp are enhanced with additional wayfinding signage that helps pedestrians navigate between the various major destinations throughout Blowing Rock. Key locations that need additional signage include along the Broyhill Park pathway, at the parking garage, the raised pedestrian crossing, and along Park Avenue.

Stormwater Management:
The design concept includes an extensive stormwater management system that addresses the existing sedimentation issue found beneath the existing fishing pier. After walking the site, the CDAC team determined that the source of the runoff is from an expansive underground drainage network and not simply from the American Legion site itself. This underground drainage network captures roof runoff from surrounding properties such as the police department and parks and recreation department as well as surface runoff from adjacent parking lots and streets. Aging shingles from these surrounding structures further contributes higher-than-normal sediment discharge during peak rainfall events.

A proposed tiered rain garden system helps to 1) slow the water to allow the sediment to fall out of suspension and 2) absorb stormwater slowly through both percolation into the ground and uptake by rain garden plants. The rain garden is designed for easy maintenance and long-term serviceability. The tiered rain garden introduces new aesthetic value to the property that can be later developed into an environmental education program for the community.
Behind the American Legion building, the existing wooden fishing dock is relocated (foreground) to align with the formal staircase (right). A stormwater/sediment control system is installed within the hillside (left) to mitigate the damaging effects of excessive sedimentation in Mayview Lake caused by uncontrolled parking lot and roof runoff.
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Blowing Rock, NC: American Legion Site Conceptual Design

A. Sediment and Stormwater Runoff Collection
B. Tiered Rain Gardens
C. Wooden Fishing Dock
D. Terraced Planting with Steps
E. Natural Path with Native Plantings
F. Stone Steps with Railings
PART 4: APPENDIX
Blowing Rock, NC: American Legion Site Conceptual Design

MEETING NOTES

Stakeholder Input Session: June 1, 2017
Blowing Rock Town Hall; 2:00-3:00pm
1036 Main Street

American Legion Site: Issues and Concerns:

• Erosion control and sedimentation

• Connectivity between Broyhill Park/Mayview Lake, through Memorial Park, to the downtown area

• Signage and wayfinding

• Connectivity to parking on site and at nearby public areas (Broyhill and pool)

• Social trails from lower parking area to the sidewalk on Laurel Lane

• ADA accessibility does not currently exist; must drive around on Laurel Lane or Clark St. > Blowing Rock Highway > Park Avenue
  - Children (summer camp)
  - Those that are less mobile
  - Need handrails

• Lighting and safety

• Keep two-way streets: no changing to one-way

Wish List

• Cohesive organization; “We always need a plan. We don’t have one right now.”

• Material consistency across site but also thinking throughout town as well

• Possibly design guidelines
  - Plant palette
  - Direction and clear signage
  - Construction materials
  - Tree replacement plan
  - New opportunities for public gathering; small scale picnicking, weddings

General
MEETING NOTES

- There are erosion control issues stemming from a broken pipe (now repaired), the parking lot, and from the stairs that has resulted in heavy sedimentation in the pond below the building. This sedimentation has become so much an issue that the Town is dredging the pond spring 2017.

- Conservatively, this site sees an influx of 14-16,000 people during the summer time.

- Broyhill Park constructed in the mid 1980s.

- It is only in the last couple years that the Town has seen an increase in interest to use the park for weddings and special events.

- As a revenue generator, there is a new emphasis to keep the parking clean and orderly.
  - Mayview Lake is used for a youth trout derby. The pond is fed by a stocked stream that comes from Bass Lake.
  - The trout derby is held in April every year.
  - The lake is maintained on a monthly basis by an outside contractor. They remove weeds and invasive species; At the moment they do not do any water testing.

- The town pool is a popular spot in the summer time.
  - The park is open 24/7. There is minimal lighting and could be improved.
MEETING NOTES

Preliminary Design Presentation: June 27, 2017

Blowing Rock Town Hall; 2:00-3:00pm
1036 Main Street

Feedback:

Parking
• Maximize parking opportunities anywhere possible

Social gathering
• The more opportunities for gathering the better
• Overlooks along the ramp are appreciated (C1)
• Pavilion at the top of the site and visible from Park Avenue is a good addition
• Stone plaza (C1-Label B) is a plus
  -Was mentioned that this space would be at-grade with the road and retaining walls to support the tennis courts

Greenspace
• Expand the flat, greenspace below the American Legion deck, retaining wall use is likely necessary and okay to explore

Stormwater retention
• General idea of treating stormwater runoff and sedimentation on the site before entering Mayview Lake was very supported
  -Ecological
  -Educational
  -Aesthetic: Tight form at top taking the brunt of in-flow loosening form to more natural rain gardens at the bottom before entering lake
  -Serviceable

• Limit child access to waterfall (C1)
• Design for maintenance and serviceability (City crews able to remove sedimentation without significant impact to planting or structures)
• Consider what the solution looks like when there is not water flowing
Blowing Rock, NC: American Legion Site Conceptual Design

MEETING NOTES

- Don’t want it to look like a broken fountain that’s not turned on

ADA-ramp

- ADA accessibility is a huge benefit, especially for weddings that are held both at Broyhill Park and the American Legion (both)
- Prefer a curved, “mountainy” ramp over a linear, straight-shot (C1)
- Resting places along the path are good (both)

Fishing pier

- Additional fishing pier is nice, located in line with the center of the American Legion building
- Keep/ renovate existing fishing pier near the base of the existing north staircase

Circulation

- Controlled/ regulated pedestrian crossings are a benefit; consolidate crossing and encourage pedestrians to not walk in the middle of Park Avenue; “Right now it’s a mess.”
- Pedestrian “sidewalk” going by the recreation department is a plus to reduce vehicle conflict zone
  - Not traditional curb-and-gutter
  - Uses material other than asphalt; keep consistent with other crosswalks downtown
  - Need to have unobstructed asphalt for community events
- One row of tents on either side and pedestrian row in the middle (doubles as emergency vehicle lane)
- Okay to reduce tennis courts to enhance the pedestrian access by the entrance to the rec. department;
- Enhance and widen with a staircase between the rec. buildings and the American Legion
- Remove the south pedestrian staircase that goes between the two basketball courts
- Enhance pedestrian access between the tennis courts and the north basketball court
MEETING NOTES

- Maintain a comfortable gap from the basketball court so there isn’t a basketball/ pedestrian conflict when passing through

- Remove the proposed sidewalk that crosses the lower entrance to the parking deck; that’s a conflict with vehicles entering and leaving the parking deck

- Relocate the painted pedestrian crossing that goes behind the angled parking adjacent to the parking deck
  - Place in between the parking deck and the front of the angled vehicles; transplant existing plantings
  - Don’t have a sidewalk running at the base of the hill that currently has a split-rail fence; “I would rather a vehicle approach me from the front than backing up towards me as a pedestrian.”

- Enhanced pedestrian crossing at the service area of the American Legion is a place
  - This is not an ideal/ dangerous parking area; it is common for drivers to enter this area and struggle to get out
  - Must maintain enough space to access the existing garage door for servicing/ unloading equipment to the lower level of American Legion

Parking

- Parking is always limited
- Losing any parking spots, even one, is going to be a concern with citizens
- Annie Cannon parking lot is being considered for overflow parking

What’s missing?

- Path that addresses the short-cutting that currently takes place from the public parking deck to Laurel Lane (Bistro employees)
- This can also be used to link people to Annie Cannon Gardens and the Glen Burney trails
- Lighting: be consistent with the lighting that is found along the walking trail in Broyhill Park and throughout town in general
Blowing Rock, NC:
American Legion Site Conceptual Design

SOIL TESTING

Soil Test Results: June 1, 2017

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Each ‘sample’ is comprised of several smaller samples that establish a soil profile average for a given area. Following is a map that shows where the samples above were obtained.
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United States Access Board; Chapter 4: Accessible Routes

From Chapter 4: Accessible Routes (https://goo.gl/WR2bkn)

401 General
401.1 Scope. The provisions of Chapter 4 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

402 Accessible Routes
402.1 General. Accessible routes shall comply with 402.
402.2 Components. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

Advisory 402.2 Components. Walking surfaces must have running slopes not steeper than 1:20, see 403.3. Other components of accessible routes, such as ramps (405) and curb ramps (406), are permitted to be more steeply sloped.

403 Walking Surfaces
403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.
403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.
403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.
403.4 Changes in Level. Changes in level shall comply with 303.
403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.
EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.
403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.
EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

403.5.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.
EXCEPTION: Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 403.5.2 shall not be required.
403.5.3 Passing Spaces. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either: a space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

403.6 Handrails. Where handrails are provided along walking surfaces with running slopes not steeper than 1:20 they shall comply with 505.

Advisory 403.6 Handrails. Handrails provided in elevator cabs and platform lifts are not required to comply with the requirements for handrails on walking surfaces.